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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/628,471 | 07/29/2003 | Ikutaroh Nagatsuka | 116705 | 4700 |

25944 7590 05/30/2006

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| EXAMINER | |
|---|---|
| HUFFMAN, JULIAN D | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2853 | |

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/628,471 | NAGATSUKA ET AL. | |
| | Examiner | Art Unit | |
| | Julian D. Huffman | 2853 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *14 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) *4,6-13,21,22 and 24* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5,14-20 and 23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Election/Restrictions*

**1.** Claims 4, 6-13, 21, 22 and 24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 14 March 2006.

The traversal is on the ground(s) that a thorough search of the subject matter of any one species would encompass a search for the subject matter of the remaining species, and thus, search and examination of the entire application could be made without serious burden. This is not found persuasive. Assuming arguendo that a search of any one species would encompass a search of the remaining species, it does not logically follow that search *and examination* of the entire application could be made without serious burden.

The requirement is still deemed proper and is therefore made FINAL.

### *Claim Rejections - 35 USC § 103*

**2.** The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

**3.** Claims 1-3, 5, 14-20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi (JP 4-39043) in view of Shishido et al. (JP 2000-158797).

Takagi discloses :

With regards to claim 1, an image forming device (fig. 1) comprising:

a recording section (1c, 1m, 1y, 1Bk, element 3) that records a predetermined image on an image recording medium;

a control section that controls the recording section to record a test image, distinct from the predetermined image, on a recording medium (fig. 14, element 101);

a detection section (14) that detects an image characteristic value of the test image recorded on the image recording medium; and

a determination section that determines whether the image characteristic value detected by the detection section is within an allowable range or not (fig. 14).

With regards to claim 2, wherein the control section controls the recording section so that before the predetermined image is recorded, the test image is recorded, and when the image characteristic value detected by the detection section is outside the allowable range, image recording conditions for recording the predetermined image on an image recording medium are set based on the detected image characteristic value (abstract).

With regards to claim 3, wherein the control section controls the image forming device to discharge the image recording medium to a discharging tray for defective media (43), when the image characteristic value detected by the detection section is outside the allowable range even after the image recording conditions have been changed more than once based on detecting the image characteristic value of more

than one recorded test image (eventually the image is discharged, and the tray is capable of storing defective media).

With regards to claim 5, the predetermined image is recorded based on the image recording conditions set by the control section, when the image characteristic value detected by the detection section is within the allowable range.

With regards to claim 14, the detection section detects display densities of the test image (abstract).

With regards to claim 15, the limitation that the medium can be rewritten with an optical signal does not further limit the claimed apparatus, see MPEP 2115.

With regards to claim 16, an image forming method comprising:

recording a test image on an image recording medium based on predetermined image recording conditions set for a predetermined image, distinct from the test image, to be recorded on an image recording medium;

detecting an image characteristic value of the test image recorded on the rewritable image recording medium; and

determining whether the detected image characteristic value is within an allowable range or not (abstract).

With regards to claim 17, recording the predetermined image on an image recording medium, based on the predetermined image recording conditions, when it is determined that the image characteristic value detected in the detecting step is within the allowable range (after calibration, a predetermined image is recorded using the conditions obtained in the calibration).

With regards to claim 18, changing the predetermined image recording conditions so that the detected image characteristic value approaches the allowable range, when it is determined that the image characteristic value detected in the detecting step is outside the allowable range (abstract); and

subsequently re-recording the test image on the image recording medium, based on the changed image recording conditions (abstract).

With regards to claim 19, changing the image recording conditions;

recording the test image on the image recording medium, based on the changed image recording conditions;

detecting the image characteristic value; and

determining whether the detected imaged characteristic value is within the allowable range, are repeated until it is determined that a current image characteristic value detected in the detecting step is within the allowable range (abstract).

With regards to claim 20, changing the image recording conditions;

recording the test image on the image recording medium, based on the changed image recording conditions;

detecting the image characteristic value; and

determining whether the detected image characteristic value is within the allowable range,

are repeated until a number of repetitions reaches a predetermined number (abstract).

Takagi does not disclose recording on a rewritable image recording medium, deleting the test image on the rewritable image recording medium and recording the predetermined image on said rewritable image recording medium.

Shishido et al. discloses test printing on a rewritable image recording medium, and deleting the test image so that it may be reused (0009, machine translation).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Takagi to form the test image on a rewritable image recording medium, erase the test image, and form the predetermined image on the rewritable image recording medium, as suggested by Shishido, for the purpose of enabling reuse of a recording medium thereby preventing waste (0046).

### *Response to Arguments*

**4.** Applicant's arguments filed 14 November 2005 have been fully considered but they are moot in view of the new grounds of rejection.

***Conclusion***

**5.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian D. Huffman whose telephone number is (571) 272-2147. The examiner can normally be reached on 10:00a.m.-6:30p.m. Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Julian D. Huffman
25 May 2006

STEPHEN MEIER
SUPERVISORY PATENT EXAMINER